

SOME ADDITIONS AND CORRECTIONS TO  
THE FLORA OF TEXAS — III

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Additional data regarding the flora of Texas contained in this paper have been uncovered in the course of my work on a Manual of the vascular plants of Texas with Marshall C. Johnston. This project is being supported, in part, by a grant from National Science Foundation (GB-2409). All of the specimens cited, unless otherwise noted, are in the Lundell Herbarium (LL) of Texas Research Foundation. I wish to acknowledge the help of my wife and colleague, Dr. Helen B. Correll, in the preparation of this paper.

**Erythronium americanum** Ker, Bot. Mag., Pl. 1113. 1808.

TEXAS: Sabine County, abundant in the woods at Patroon Creek, campground about 10 miles north of Milam, flowers yellow, outer petals red-brown on the lower surface, [no date], *Betty E. Lemmon* 830. San Augustine County, rich hardwoods, 7 miles east of San Augustine, east of Apolo-gacho stream, Cousins' farm, black ankle community, March 17, 1962, *D. S. Correll & Helen B. Correll* 24829.

As far as we know, this species is new to Texas. It has previously been reported to occur only as far southwest as Arkansas and Oklahoma. It differs from *A. albidum* Nutt. var. *mesochoreum* (Knerr) Rickett, east- and north-central Texas, in having yellowish instead of pinkish or bluish white flowers.

**Triphora trianthophora** (Sw.) Rydb. var. *Schaffneri* Camp, *Rhodora* 42: 55-56. 1940.

TEXAS: Smith County, low woods about 1 mile east of Hopewell Baptist Church at Swan, in clumps of 100 or more plants scattered, plants up to 3 dm. high, stems reddish purple, capsule erect, flowers pink, readily deciduous, October 20, 1965, *D. S. Correll & Helen B. Correll* 32034.

This distinctive variant, distinguished from var. *trianthophora* by its smaller flowers and erect, not pendent, fruits, is exceedingly abundant in a large tract of virgin forest in the above-cited locality in Texas. It is new to the flora of the state.

**Emex spinosa** (L.) Campd., Mon. Rum. 58, *tab. 1, fig. 1.* 1819.

TEXAS: Kleberg County, in sandy loam, old school ground, Riviera, flowers white, March 10, 1966, *John R. Crutchfield 1090.*

This Mediterranean species has become introduced in various parts of the world. As far as we know, this is the first collection from Texas.

**Sesuvium erectum** Correll, sp. nov.

Herba perennis, typica erecta vel recto-patens, cum globulis crystallinis plus minusve velata, fusca vel fumea in siccitate; caules ad 5 dm. vel magis longi; folia oblanceolata vel spathulata vel aliquando lineari-oblonga, ad apicem obtusa, infra in basem amplectentem decrescentia; flores plurimi, e foliorum et ramorum axillis orti, sessiles vel pedicellis ad 5 mm. longis; lobi calycis late elliptici vel ovato-lanceolati, ad apicem obtusi vel subacuti, intra roseo-violacei, appendice subapicali dorsali apicem sepali aequanti vel superanti; styli 3 ad 5, conspicui, typice atri ubi exsiccati; stamina plurima; capsula ovoidea, ad apicem obtusa et truncata; semina turgida, atra, circa 1 mm. longa.

Plants perennial, typically erect to erect-spreading or sometimes decumbent, more or less adorned throughout with crystalline globules, when dry brownish black to dark gray; stems up to 5 dm. or more long; leaves oblanceolate to spatulate or sometimes linear-oblong, obtuse at apex, tapered below to a clasping base, up to 4 cm. long and 8 mm. wide; flowers numerous, in the axils of leaves and branches, sessile or with pedicels rarely up to 5 mm. long; calyx-lobes broadly elliptic to ovate-lanceolate, obtuse to subacute at apex, rose-purple within, 4-8 mm. long, with a subapical dorsal appendage about equal to or greatly exceeding the sepal-apex; styles 3 to 5, conspicuous, typically black when dry; stamens numerous; capsule ovoid, blunt and truncate at apex, about 5 mm. long and 3 mm. in diameter; seeds black, plump, about 1 mm. long.

TEXAS: Kenedy County, edge of pond, 25 miles south of Sarita, along U. S. rte. 77, July 12, 1957, *D. S. Correll & I. M. Johnston 17868* (holotype, LL). Brooks County, in depression among sand hills near gypsum quarry, several miles southeast of Falfurrias, plant erect (only one plant seen), July 10, 1957, *D. S. Correll & I. M. Johnston 17825* (paratype, LL).

According to our interpretation of the complex genus *Sesuvium*, there are six species in Texas. One of these, *S. verrucosum* Raf., is found in the interior of west and northwest Texas, and, of special interest, when dry the plants are usually a light brown or tan-color. The other five taxa are essentially coastal with the exception of *S. erectum* which occurs northwestward along the Rio Grande into Trans-

Pecos, Texas. Interestingly, all of these coastal plants, except *S. trianthemoides*, are dark gray or nearly black when dry. Of these taxa, *S. trianthemoides* and *S. maritimum* (Walt.) B.S.P., with their 5-staminate flowers, and *S. Portulacastrum* L., with its large, long-pediceled flowers, are quite distinctive. A small intricate plant, typically of coastal clay dunes and flats, which has sessile, narrowly linear-oblong leaves and is densely covered with crystalline globules, is referred to *S. sessile* Pers. The remaining robust, erect to erect-spreading, typically more inland, plants are referred to *S. erectum*.

***Sesuvium trianthemoides* Correll, sp. nov.**

Herba annua, succulenta, fulva in siccitate, basiramifera, cum globulis dispersis crystallinis grandibus; caules ad 3.5 dm. vel magis longi, internodiis 4-5 cm. longis; folia opposita, oblanceolata vel spathulata, ad apicem obtusa, minimum 3 cm. longa (petiolo incluso) et 1 cm. lata supra medium, infra in petiolum conspicuum attenuata; petiolus basi late scarioso-alatus et amplexans; flores solitarii, sessiles, e foliorum et ramorum axillis orti; lobi calycis triangulo-ovati, ad apicem subacuti, valde nervati, circa 3.5 mm. longi, margine hyalino, appendice apicali dorsali parva; stamina 5, filamentis gracilibus circa 1 mm. longis; ovarium ovoideum bicellulare; styli 2, circa 0.5 mm. longi; capsula ovoideo-ellipsoidea ad apicem acuta, 4-5 mm. longa, circumscissilis; semina circa 10 in quaque capsula, circa 1.5 mm. longa, conspicue rugosa cristis irregularibus ferrugineis granularibus, plagis gilvis in ambitu vagis e hilo extensis.

Plant annual, fleshy, brown when dry, branched from the base, the herbage with scattered large crystalline globules; stems up to 3.5 dm. long or more, the internodes 4-5 cm. long; leaves opposite, oblanceolate to spatulate, obtuse at apex, at least 3 cm. long (including the petiole) and 1 cm. wide above the middle, tapered below into a conspicuous petiole; petiole broadly scarious-winged at base and clasping; flowers solitary in the axils of leaves and branches, sessile; calyx-lobes triangular-ovate, subacute at apex, strongly nerved, about 3.5 mm. long, with hyaline margins, the dorsal apical appendage small; stamens 5, with slender filaments about 1 mm. long; ovary ovoid, 2-celled; styles 2, about 0.5 mm. long; capsule ovoid-ellipsoid, pointed at apex, 4-5 mm. long, circumscissile; seeds about 10 in each capsule, about 1.5 mm. long, conspicuously rugose with brownish granular irregular ridges, with additional light patches extended in irregular lines from the hilum.

TEXAS: Kenedy County, dunes, July 11, 1947, *B. C. Tharp 47431* (holotype, TEX).

Similarly to *S. maritimum*, the flowers of this species

have only 5 stamens. However, the conspicuously rugose, not smooth, seeds readily set it apart from that species. Also, as its name implies, it resembles very closely in habit and appearance the rather common *Trianthema Portulacastrum* L. Oddly enough, its rugose seeds also resemble those of *Trianthema*.

***Paronychia Jamesii* T. & G. var. *praelongifolia* Correll, var. nov.**

Varietate *Jamesii* similis, sed foliis calycem superantibus.

Similar to var. *Jamesii* but with leaves exceeding the calyx.

TEXAS: Brewster County, North Sunny Glenn, July 17, 1938, O. E. Sperry T683 (TAES); top of Old Baldy Mt., June 18, 1941, B. H. Warnock 20355. Childress County, Childress, May 1930, Biol. Class 18 (TEX). Crockett County, infrequent perennial, limestone soil, 15 miles north of Juno, alt. 1500 ft., June 7, 1957, B. H. Warnock & W. D. McBryde 15191. Culberson County, off highway U. S. 62, limestone foothills of Guadalupe Mountains, entrance to Guadalupe, perennial herb, August 8, 1945, C. L. Lundell & Amelia A. Lundell 14374 (holotype, LL); Beach Mts., 8 miles north of Van Horn, frequent on slopes and summit, June 3, 1938, H. C. Cutler 29644 (TAES). El Paso County, crevices of igneous rock, west slope of Franklin Mts., east of Canutillo, July 4, 1958, D. S. Correll & I. M. Johnston 19245. Howard County, Big Spring, May 24, 1945, V. L. Cory 49279. Potter County, along a small stream, 10 miles north of the Canadian River on Hy. #87, flowers yellow, June 2, 1957, D. S. Correll 16616. Taylor County, 18 miles southwest of View, May 27, 1943, W. L. Tolstead 7302 (TEX); San Angelo, common on gravelly arid soil, May 19, 1899, W. L. Bray 359 (TEX). Wilbarger County, 3-3/4 miles south of Vernon, May 12, 1934, H. B. Parks & V. L. Cory 13179 (TAES).

The calyx of var. *Jamesii* usually exceeds or is equal to the subtending leaves, but the calyx of var. *praelongifolia* is exceeded by the leaves, often conspicuously so, and the plants are found mainly in west and northwest Texas.

*Cuphea carthagenensis* (Jacq.) Macbr., Field Mus. Pub., Bot. 8: 124. 1930.

TEXAS: Hardin County, 4.5 miles north of Sour Lake, forming a large colony on edge of low wet woods, flowers pink, October 10, 1965, D. S. Correll 31987.

This species, which has been known from North Carolina and Louisiana, is new to Texas. It is quite different from *C. petiolata* (L.) Koehne that occurs from Oklahoma northward in its sparsely hispid stems and branches, flowers half the size of that species and its much-abbreviated, gla-

brous style in contrast to the long, pubescent style of *C. petiolata*.

**Frankenia Johnstonii** Correll, sp. nov.

Frutex ad 3 dm. altus, basi lignea a radicibus fuscis filo metallico similibus sustinenti et caules plures vel multos elongatos arcuatos vel valde recurvatos emittenti; planta omnis cana vel glaucescens; caules subherbacei, circa 1 mm. lati, sparsim pilosi, pilis brevibus albidis appressis vel incurvatis; internodia vulgo 1-1.5 cm. longa; folia opposita, certe petiolata, oblanceolata vel oblongo-elliptica, ad basim rotundata, ad apicem rotundatum minute apiculata, ad 13 mm. longa et 4 mm. lata, margine revoluta, supra pilosis appressis sparsim brevopilosa, infra sparsim farinosa et incana; petioli flavovirentes, 1-2 mm. longi, leviter alati, alis pubescentibus membranaceis circum nodum conjunctis; flores sessiles, solitarii, ad apicem ramulorum axillarium; calycis tubus valde costatus, circa 4 mm. longus, 5 lobis triangularibus circa 2 mm. longis; petala 5, unguiculata, alba elliptico-oblanceolata, ad apicem erosa, calyce duplo longiora; stamina 6, inclusa longitudine varia; styli 3-fissi.

Shrub up to 3 dm. high, the woody base supported by dark brown wiry roots and giving rise to several or many elongated arching or strongly recurved willowy stems, the entire plant grayish or bluish green; stems subherbaceous, about 1 mm. thick, sparsely pilose with short whitish appressed or incurved hairs; internodes mostly 1-1.5 cm. long; leaves opposite, distinctly petioled, oblanceolate to oblong-elliptic, rounded at base, minutely apiculate at the rounded apex, up to 13 mm. long and 4 mm. wide, the margins somewhat revolute, the upper surface sparsely short-pilose with appressed hairs, the lower surface farinaceous and hoary; petioles brownish-green, 1-2 mm. long, slightly winged with the membranous pubescent wings united around the node; flowers sessile and solitary at the apex of short axillary branchlets; calyx-tube strongly ribbed, about 4 mm. long, the 5 triangular lobes about 2 mm. long; petals 5, clawed, white, elliptic-oblanceolate, erose at the apex, about twice as long as the calyx; stamens 6, of various lengths, included; styles 3-cleft.

TEXAS: Zapata County, rocky hillside 24.5 miles northeast of San Ygnacio on road to Aguilares, small shrub up to 1 foot high, flowers white, March 16, 1966, *D. S. Correll 32254* (holotype, LL; isotypes, UC, GH, TEX, US). Starr County, on salt flats along Arroyo Los Olmos just east of El Sauz, spreading shrub 1 foot high, flowers white, March 17, 1966, *D. S. Correll 32308* (paratypes, DS, K, LL, S).

This species is characterized by its elongated, strongly recurved stems with long internodes, and distinctly petioled leaves that are farinaceous on their lower surface. These characteristics readily distinguish it from the other four species found in the United States and northern Mexico.

It is a pleasure to name this distinctive species for my friend and colleague, Marshall C. Johnston, who kindly directed my attention to its uniqueness.

**Myriophyllum verticillatum** L., Sp. Pl. 992. 1753.

TEXAS: Bowie County, attached and floating in Club Lake about 3 miles west of New Boston, May 12, 1962, *D. S. Correll & E. C. Ogden 25243*. Harrison County, Crip's Camp, east of Uncertain, floating on Caddo Lake, May 10, 1962, *D. S. Correll & E. C. Ogden 25213*. Henderson County, in water at head of Big Lake (Preserve), Koon Kreek Klub, off rte. 19, 12 miles south of Athens, May 5, 1965, *D. S. Correll, Helen B. Correll & John R. Crutchfield 30938*. Rusk County, in water of Lake Cherokee, near Monroe off rte. 322 from Longview to Henderson, June 3, 1965, *D. S. Correll & Helen B. Correll 31094*. Indefinite: "Texas," *E. Dapprich 7577* (SMU).

This species is new to Texas. It is readily distinguished from *M. heterophyllum* Michx., which it superficially resembles, by having its floral bracts pinnately dissected or lobed instead of being entire or only merely toothed.

**Limonium limbatum** Small var. *glabrescens* Correll, var. nov.

Ramuli ultimi inflorescentiae elongati et aliquantum laxi; calycis costae glabrae vel pilis non nisi paucis sparsis.

Ultimate branchlets of the inflorescence elongated and rather laxly flowered; calyx-ribs glabrous or with only a few scattered hairs.

TEXAS: Reeves County, in saline soils just north of Pecos, flowers nearly white, July 27, 1957, *D. S. Correll & I. M. Johnston 18564* (holotype, LL).

The ultimate branchlets of the inflorescence in var. *glabrescens* are somewhat elongated and more laxly flowered than in var. *limbatum* whose flowers are borne in dense abbreviated clusters. The calyx-ribs of var. *glabrescens* are also glabrous or are provided with only a few scattered hairs instead of being densely pubescent as in var. *limbatum*.

**Scrophularia marilandica** L., Sp. Pl. 619 1753.

TEXAS: Red River County, down Red River from Hy. 39 [37], first collection in Texas, August 25, 1948, *H. B. Parks s. n.*; On river terraces in open woods along the Red River above bridge, just west of Rte. 37, north of Negley, plants up to 7 ft. high, August 29, 1966, *D. S. Correll 33564*.

This species has apparently never been reported from Texas. It was first collected by Parks too late to include in his and Cory's *Catalogue of the Flora of Texas* (Texas Agr. Exp. Sta. Bull. 550: 1937). Also, for some unknown reason,

it was not included in Cory's unpublished revision copies of the *Catalogue*. It was also omitted from Gould's *Texas Plants*, published in 1962.

**Proboscidea sabulosa** Correll, sp. nov.

(Plate 1335)

Herba annua, procumbens et ramosissima, ad circa 12 dm. lata et 4 dm. alta, omnino viscido-pubescent; folia petiolis incrassatis ad 10 cm. vel magis longis, triangulo-ovata vel late subreniformia, late cordata, apice rotundata vel obtusa, margine undulato-repando, ad circa 12 cm. longa et lata; flores plures, in racemo congesto super pedunculo abbreviato prodientes; inflorescentia folia brevior; pedicelli per anthesin graciles circa 1 cm. longi, maturitate crassi circa 2 cm. longi; bracteae 2, oblongo-ellipticae, 7-8 mm. longae; calyx 1-1.3 cm. longus, supra medium irregulatim 5-lobatus, ad basim ventraliter fissus; corolla tubulari-cylindracea, non nisi leviter ventricosa; corollae tubus extra cremeus et sparsim glandulosus, circa 2 cm. longus, orificio 1 cm. lato; faux glabra, cremea, maculis parvis rubiginosis et linea crocea pro longitudine tubi facie inferiore extensa; corollae lobi 5, ovati vel aliquantum quadrati, violacei, 4-5 mm. longi, recurvati, lobo infimo plicato; capsulae corpus oblongo-ellipsoideum, aliquantum laterale complanatum, endocarpio grosse sculpto, pagina dorsali carinatum, circa 7 cm. longum et 1.5-2 cm. latum, in cornu gracile recurvatum, longitudine corporis duplo longius protractum.

Plant annual, sprawling and much-branched, up to about 12 dm. across and 4 dm. high, the herbage viscid-pubescent throughout; leaves with thickened petioles up to 10 cm. long or more, triangular-ovate to broadly subreniform, broadly cordate, rounded to obtuse at apex, the margins undulate-repand, up to about 12 cm. long and broad; flowers several, borne in a congested raceme on an abbreviated peduncle, greatly exceeded by the foliage; pedicels slender and about 1 cm. long in flower, becoming stout and about 2 cm. long in fruit; bracts 2, oblong-elliptic, 7-8 mm. long; calyx 1-1.3 cm. long, irregularly 5-lobed above the middle, ventrally split to the base; corolla tubular-cylindric, only slightly ventricose; corolla-tube cream-color and sparsely glandular without, about 2 cm. long and 1 cm. across the orifice, the glabrous throat cream-color with small reddish spots and a deep yellow line running the length of the tube on the lower side; corolla-lobes 5, ovate to somewhat quadrate, purplish red, 4-5 mm. long, recurved, the lower lobe pleated; fruit-body oblong-ellipsoid, somewhat laterally compressed, the endocarp coarsely sculptured, keeled on the dorsal surface, about 7 cm. long and 1.5-2 cm. thick, tapered into a slender recurved horn that is about twice as long as the body.

TEXAS: Crane County, on shinnery oak dunes along Ranch Road #1233 about 1.5 miles west of U. S. Rte. 385, north of Crane, August 6, 1966, *D. S. Correll 33328* (holotype, LL, isotypes, GH, TEX, UC, US);

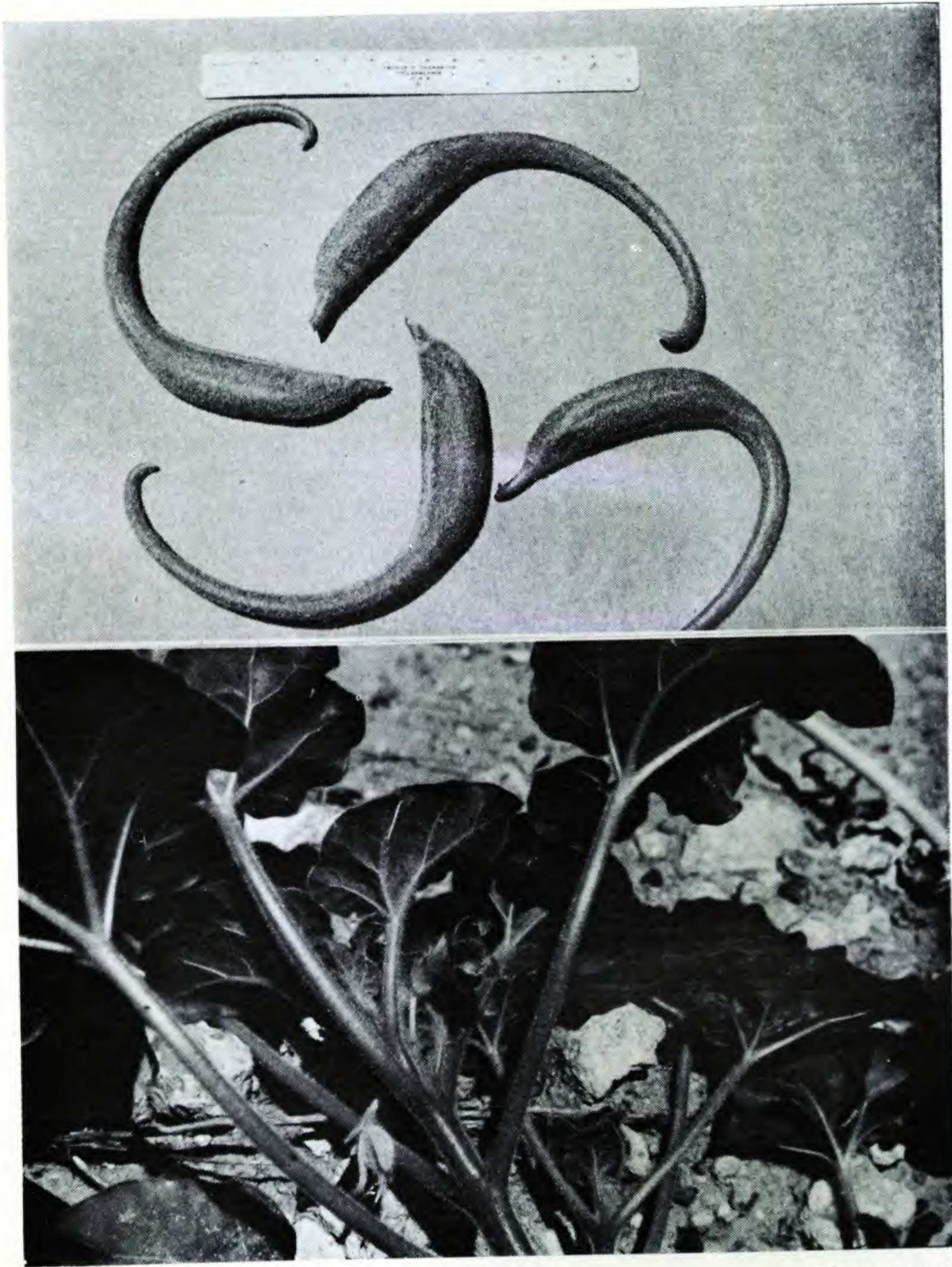


Plate 1335

PROBOSCIDEA SABULOSA Correll: Upper, fruits, about  $\times 1/3$ ; lower, portion of plant, note tiny flower in center of picture, about  $\times 2$ , from Crane Co., Texas, Correll, no. 33328.



in deep sand of dunes 11 miles northwest of Crane on Ranch Road #1601 to Penwell, August 6, 1966, *D. S. Correll 33332* (paratype, LL).

This is apparently the smallest flowered species in this genus. The abbreviated inflorescences are concealed by the foliage and it is necessary to search the plant in order to locate flowers. Because of its exceeding abundance in the dunes where it occurs in Crane County it is most unusual that this species has not come to light before now.

*Utricularia juncea* Vahl, Enum. Pl. 1: 202. 1804.

TEXAS: Angelina County, along marshy edge of brook, in pine land, off U. S. 63, near Beans Place, northwest of Jasper, September 8, 1942, *C. L. Lundell 11797*; boggy stream, 3 miles west of Bouton Lake, Angelina National Forest, June 6, 1963, *D. S. Correll & D. C. Wasshausen 27522*. Henderson County, on mud, boggy area above Withers Lake, Koon Kreek Klub, off Rte. 19, 12 miles south of Athens, May 5, 1965, *D. S. Correll, Helen B. Correll & John R. Crutchfield 30945*.

This species is apparently new to Texas. It resembles *U. cornuta*, Michx., but the flowers are about half the size of that species.

*Plantago insularis* Eastw. var. *fastigiata* (Morris) Jepson, Man. Fl. Pl. California 956. 1925.

*P. minima* Cunn., Proc. Ind. Acad. Sci. 1896: 202. 1897.

*P. scariosa* Morris, Bull. Torrey Bot. Club 27: 117. 1900.

TEXAS: Brewster County, beds near Terlingua, Big Bend National Park, April 18, 1961, *D. S. Correll & R. C. Rollins 23631*; mouth of Tornillo Creek at Hot Springs on gravel bars, Big Bend National Park, April 22, 1966, *D. S. Correll & R. C. Rollins 32642*. Presidio County, on red and brownish black cobbly slope of small open canyon, about 24.5 miles southeast of Redford, February 7, 1965, *D. S. Correll 30682*.

This species, which heretofore has been known to occur from California to Utah and Arizona, is new to Texas. Its cottony leaves that grow in a dense clump and its broad scarious bracts are distinctive. My wife, who has been studying the genus *Plantago*, called my attention to this addition to the flora of Texas.

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